

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/521, 454 A
Source: IFWP
Date Processed by STIC: 08/04/2006

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 08/04/2006

PATENT APPLICATION: US/10/521,454A

TIME: 12:04:30

Input Set : A:\2006-05-07 0230-0222PUS1.ST25.txt

Output Set: N:\CRF4\08042006\J521454A.raw

```

3 <110> APPLICANT: Ichiro HIRAO et al.
5 <120> TITLE OF INVENTION: NUCLEOSIDES OR NUCLEOTIDES HAVING NOVEL UNNATURAL BASES AND
USE THEREOF
7 <130> FILE REFERENCE: 0230-0222PUS1
9 <140> CURRENT APPLICATION NUMBER: US 10/521,454A
10 <141> CURRENT FILING DATE: 2005-01-14
12 <150> PRIOR APPLICATION NUMBER: JP 2002-208568
13 <151> PRIOR FILING DATE: 2002-07-17
15 <160> NUMBER OF SEQ ID NOS: 14
17 <170> SOFTWARE: Patentin 3.3
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 100
21 <212> TYPE: RNA
22 <213> ORGANISM: Artificial sequence
24 <220> FEATURE:
25 <223> OTHER INFORMATION: RNA aptamer
27 <400> SEQUENCE: 1
28 gggaguggag gaauucaucg aggcauauugu cgacuccguc uucccucaaa ccaguauaaa 60
29 auugguuuuu gcauauugccu uagcgacagc aagcuucugc 100
32 <210> SEQ ID NO: 2
33 <211> LENGTH: 39
34 <212> TYPE: DNA
35 <213> ORGANISM: Artificial sequence
37 <220> FEATURE:
38 <223> OTHER INFORMATION: Designed primer for PCR
40 <400> SEQUENCE: 2
41 ggtaatacga ctactatag ggagtggagg aattcatcg 39
44 <210> SEQ ID NO: 3
45 <211> LENGTH: 29
46 <212> TYPE: DNA
47 <213> ORGANISM: Artificial sequence
49 <220> FEATURE:
50 <223> OTHER INFORMATION: Designed primer for PCR
52 <400> SEQUENCE: 3
53 gcagaagctt gctgtcgcta aggcataatg 29
56 <210> SEQ ID NO: 4
57 <211> LENGTH: 29
58 <212> TYPE: DNA
59 <213> ORGANISM: Artificial sequence
61 <220> FEATURE:
62 <223> OTHER INFORMATION: Designed primer for PCR
64 <220> FEATURE:
65 <221> NAME/KEY: misc_feature
66 <222> LOCATION: (17)..(17)

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67 <223> OTHER INFORMATION: n is an unnatural base equivalent to a 2-amino-6-(2-thienyl)-
purine-9-yl
68      group
70 <400> SEQUENCE: 4
W--> 71 gcagaagctt gctgtcncta aggcatatg                29
74 <210> SEQ ID NO: 5
75 <211> LENGTH: 29
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial sequence
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Designed primer for PCR
82 <220> FEATURE:
83 <221> NAME/KEY: misc_feature
84 <222> LOCATION: (14)..(14)
85 <223> OTHER INFORMATION: n is an unnatural base equivalent to a 2-amino-6-(2-thienyl)-
purine-9-yl
86      group
89 <400> SEQUENCE: 5
W--> 90 gcagaagctt gctntcgcta aggcatatg                29
93 <210> SEQ ID NO: 6
94 <211> LENGTH: 29
95 <212> TYPE: DNA
96 <213> ORGANISM: Artificial sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: Designed primer for PCR
101 <220> FEATURE:
102 <221> NAME/KEY: misc_feature
103 <222> LOCATION: (9)..(9)
104 <223> OTHER INFORMATION: n is an unnatural base equivalent to a 2-amino-6-(2-
thienyl)-purine-9-yl
105      group
107 <400> SEQUENCE: 6
W--> 108 gcagaagcnt gctgtcgcta aggcatatg                29
111 <210> SEQ ID NO: 7
112 <211> LENGTH: 29
113 <212> TYPE: DNA
114 <213> ORGANISM: Artificial sequence
116 <220> FEATURE:
117 <223> OTHER INFORMATION: Designed primer for PCR
119 <220> FEATURE:
120 <221> NAME/KEY: misc_feature
121 <222> LOCATION: (9)..(9)
122 <223> OTHER INFORMATION: n is a, g, c, t, unknown or other
124 <220> FEATURE:
125 <221> NAME/KEY: misc_feature
126 <222> LOCATION: (17)..(17)
127 <223> OTHER INFORMATION: n is an unnatural base equivalent to a 2-amino-6-(2-
thienyl)-purine-9-yl
128      group
130 <400> SEQUENCE: 7
W--> 131 gcagaagcnt gctgtcncta aggcatatg                29
134 <210> SEQ ID NO: 8
135 <211> LENGTH: 35

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136 <212> TYPE: DNA
137 <213> ORGANISM: Artificial sequence
139 <220> FEATURE:
140 <223> OTHER INFORMATION: Synthesized template strand for transcription
142 <220> FEATURE:
143 <221> NAME/KEY: misc_feature
144 <222> LOCATION: (29)..(29)
145 <223> OTHER INFORMATION: n is an unnatural base equivalent to a 2-amino-6-(2-
thienyl)-purine-9-yl
146     group
148 <400> SEQUENCE: 8
W--> 149 tattatgctg agtgatatcc ctccttctnt ctcgt          35
152 <210> SEQ ID NO: 9
153 <211> LENGTH: 35
154 <212> TYPE: DNA
155 <213> ORGANISM: Artificial sequence
157 <220> FEATURE:
158 <223> OTHER INFORMATION: Synthesized template strand for transcription
160 <400> SEQUENCE: 9
161 tattatgctg agtgatatcc ctccttctat ctcgt          35
164 <210> SEQ ID NO: 10
165 <211> LENGTH: 28
166 <212> TYPE: DNA
167 <213> ORGANISM: Artificial sequence
169 <220> FEATURE:
170 <223> OTHER INFORMATION: Designed primer for transcription
172 <400> SEQUENCE: 10
173 ataatcgact ctactatagg gaggaaga          28
176 <210> SEQ ID NO: 11
177 <211> LENGTH: 200
178 <212> TYPE: RNA
179 <213> ORGANISM: Artificial sequence
181 <220> FEATURE:
182 <223> OTHER INFORMATION: RNA aptamer 9A
184 <400> SEQUENCE: 11
185 gggaguggag gaaucaucg aggcuaugu cgacuccguc uuccuucaaa ccaguauaa          60
187 auugguuuaa gcuaugccu uagcgacagc aagcuucugc gggaguggag gaaucaucg          120
189 aggcuaugu cgacuccguc uuccuucaaa ccaguauaa auugguuuaa gcuaugccu          180
191 uagcgacagc aagcuucugc                                200
194 <210> SEQ ID NO: 12
195 <211> LENGTH: 101
196 <212> TYPE: RNA
197 <213> ORGANISM: Artificial sequence
199 <220> FEATURE:
200 <223> OTHER INFORMATION: RNA aptamer 2x9A
202 <400> SEQUENCE: 12
203 gggaguggag gaaucaucg aggcuaucgg gaaccuaua uugcuuuugg uagcuguauu          60
205 caccuguaac agcauagcc uagcgacag caagcuucug c                                101
207 <210> SEQ ID NO: 13
208 <211> LENGTH: 15

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209 <212> TYPE: RNA
210 <213> ORGANISM: Artificial sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: Synthetic RNA 15-mer
215 <220> FEATURE:
216 <221> NAME/KEY: misc_feature
217 <222> LOCATION: (11)..(11)
218 <223> OTHER INFORMATION: n is a, g, c, u, unknown or other
220 <400> SEQUENCE: 13
W--> 221 gggaggaaga nagag      15
224 <210> SEQ ID NO: 14
225 <211> LENGTH: 17
226 <212> TYPE: RNA
227 <213> ORGANISM: Artificial sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Synthetic RNA 17-mer
232 <220> FEATURE:
233 <221> NAME/KEY: misc_feature
234 <222> LOCATION: (11)..(11)
235 <223> OTHER INFORMATION: n is a, g, c, u, unknown or other
237 <400> SEQUENCE: 14
W--> 238 gggaggaaga nagagca    17
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RAW SEQUENCE LISTING ERROR SUMMARY
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; N Pos. 17 ✓
Seq#:5; N Pos. 14 ✓
Seq#:6; N Pos. 9 ✓
Seq#:7; N Pos. 9, 17 ✓
Seq#:8; N Pos. 29 ✓
Seq#:13; N Pos. 11 ✓
Seq#:14; N Pos. 11 ✓

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:4; Line(s) 67
Seq#:5; Line(s) 85
Seq#:6; Line(s) 104
Seq#:7; Line(s) 127
Seq#:8; Line(s) 145

VERIFICATION SUMMARY

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Input Set : A:\2006-05-07 0230-0222PUS1.ST25.txt

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L:71 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:90 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:108 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0